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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,985	12/22/2003	Shui-Ming Cheng	N1085-00168	9060
8933	7590	11/01/2005	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			SCHILLINGER, LAURA M	
			ART UNIT	PAPER NUMBER
			2813	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/743,985	Applicant(s) CHENG ET AL.	
	Examiner Laura M. Schillinger	Art Unit 2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-34 is/are pending in the application.
- 4a) Of the above claim(s) 20-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/22/03</u> . | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____. |
|--|---|

DETAILED ACTION

Election/Restrictions

Claims 20-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/24/05.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Crowder et al ('262).

Crowder teaches the following claimed limitations as cited below:

11. An SOI device having a gate comprising:

O or halogen ions providing implants (Col.4, lines: 50-60) in a substrate of an SOI device (Col.4, lines: 25-35); and

One or more additional gate regions covering all implants under the one or more additional gate regions (Col.6, lines: 20-25), the ions forming thicker gate oxide regions (Col.6, lines: 5-10), and reducing substrate resistance under each of the additional gate regions (Col.1, lines: 25-45).

12. The device of claim 11, further comprising:

implanted ions in the substrate, the one or more additional gate regions covering the implanted ions (Col.6, lines: 20-25).

13. The device of claim 11, further comprising: a gate oxide covering the ions and being under the one or more additional gate regions (Col.5, lines: 58-68).

14. The device of claim 11, further comprising:

a gate of the SOI device (Col.6, lines: 20-25);

a gate oxide under the gate and under the one or more additional gate regions (Col.5, lines: 58-68); and

the gate oxide covering the ions (Col.5, lines: 58-68)

15. The device of claim 11, further comprising

a gate electrode layer forming an SOI device gate and the one or more additional gate regions (Col.6, lines: 20-25); and

a gate oxide layer under the gate and under the one or more additional gate regions (Col.6, lines: 20-25 and Col.5, lines: 58-68).

16. The device of claim 11, further comprising:

an SOI device gate and the one or more additional gate regions being formed from a gate electrode layer (Col.6, lines: 20-25); and

a gate oxide layer wherein the gate oxide layer is under the gate and under the one or more additional gate regions (Col.5, lines: 58-68).

17. The device of claim 11, further comprising:

a thin gate oxide layer having a thicker gate oxide covering the ions (Col.5, lines: 58-68);

an SOI device gate on the thin gate oxide layer (Col.6, lines: 20-25); and

the one or more additional gate regions being on the thicker gate oxide (Col.6, lines: 20-25).

18. The device of claim 11, further comprising:

the thicker gate oxide being a selective epitaxy growth (Col.5, lines: 58-68).

19. The device of claim 11, further comprising

the substrate having STI enclosures for the ions (Col.4, lines: 25-35).

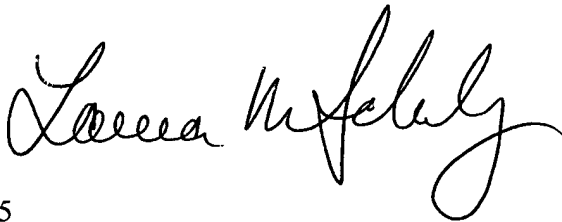
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Laura M Schillinger', written in a cursive style.

Laura M Schillinger
Primary Examiner
Art Unit 2813

10/25/05